

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended): A compound represented by the following formula (I):

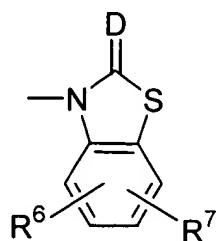
X-Q-C(R¹)(R²)-Z, or a salt thereof, and or a hydrate thereof and or a solvate thereof, wherein:

R¹ and R² each independently represent hydrogen atom, an alkyl group, a cycloalkyl group, a hydroxyalkyl group, or an alkenyl group;

Z represents either of the following groups:



wherein R³ represents an alkyl group, a cycloalkyl group, a hydroxyalkyl group, or an alkenyl group; p represents an integer of from 3 to 8; R⁴ and R⁵ each independently represent hydrogen atom or an alkyl group, or R⁴ and R⁵ represent a 5- to 7-membered heterocyclic group together with other intervening atoms; and B represents a group represented by the following formula:



wherein R⁶ and R⁷ each independently represent a substituent selected from the group consisting of hydrogen atom, a halogen atom, nitro group, an alkyl group, a cycloalkyl group, an alkenyl group, a halogenated alkyl group, hydroxyl group, an alkoxy group, a halogenated alkoxy group, an alkoxycarbonyl group, phenyl group, a substituted or unsubstituted amino group, an alkylthio group, an alkylsulfinyl group, an alkylsulfonyl group, a substituted or unsubstituted sulfamoyl group, a substituted or unsubstituted carbamoyl group, an acyl group, cyano group, and an alkynyl group; and D represents sulfur atom, oxygen atom, or a group represented by NR⁸ wherein R⁸ represents a substituent selected from the group consisting of hydrogen atom, an alkyl group, a cycloalkyl group, a cycloalkyl-substituted alkyl group, an alkenyl group, a halogenated alkyl group, a hydroxyalkyl group, an alkoxyalkyl group, an alkoxycarbonyl group, phenyl group, an alkylsulfinyl group, an alkylsulfonyl group, a substituted or unsubstituted sulfamoyl group, an alkylsulfonylamino group, an alkylcarbonylamino group, a substituted or unsubstituted carbamoyl group, an acyl group, cyano group and an alkynyl group; and

when X represents a monocyclic or polycyclic cycloalkyl group which may be substituted with an alkyl group, a cycloalkyl-substituted alkyl group, an aryl group, or a heteroaryl group, Q represents a group represented by -CO-, -C(=NOH)- or -C(Y)(A)- wherein Y represents hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group, a monocyclic or polycyclic cycloalkyl group, a cycloalkyl-substituted alkyl group, an aryl group, an aryl-substituted alkyl group, a heteroaryl group, or a heteroaryl-substituted alkyl group, and A represents a group represented by -OR⁹ wherein R⁹ represents hydrogen atom, an alkyl group, a cycloalkyl group, a cycloalkyl-substituted alkyl group, an alkenyl group, an aryl group, an aryl-substituted alkyl group,

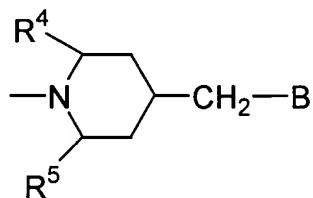
a hydroxyalkyl group, or an acyl group, and when X represents a 8- to 10-membered bicyclic heteroaryl group containing one or two hetero atoms, Q represents a single bond.

2. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 1, wherein both of R¹ and R² are hydrogen atoms, R³ is an alkyl group, p is 4, R⁴ and R⁵ each independently represent hydrogen atom or an alkyl group, R⁶ and R⁷ each independently represent a substituent selected from the group consisting of hydrogen atom, a halogen atom, nitro group, an alkyl group, a halogenated alkyl group, and an alkoxy group, R⁸ represents a substituent selected from the group consisting of hydrogen atom, an alkyl group, a halogenated alkyl group and an acyl group; when X represents a monocyclic or polycyclic cycloalkyl group which may be substituted with an alkyl group or a substituted or unsubstituted phenyl group (the substituent is at least one substituents selected from the group consisting of a halogen atom, an alkyl group, a halogenated alkyl group, an alkoxy group, a halogenated alkoxy group, cyano group and a substituted or unsubstituted aminosulfonyloxy group), Q is a group represented by -CO-, -C(=NOH)- or -C(Y)(A)- where Y is hydrogen atom, and A is a group represented by -OR⁹ wherein R⁹ is hydrogen atom, an alkyl group, or an acyl group, and when X is a 8- to 10-membered bicyclic heteroaryl group containing one or two hetero atoms, Q is a single bond.

3. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 2, wherein R³ is an alkyl group, both of R⁴ and R⁵ are hydrogen atoms, R⁶ is hydrogen atom, R⁷ is a substituent selected from the group consisting of hydrogen atom, a halogen atom, nitro group, an alkyl group, a halogenated alkyl group, and an alkoxy group, X represents a

monocyclic or polycyclic cycloalkyl group which may be substituted with an alkyl group or a substituted or unsubstituted phenyl group (the substituent is at least one substituent selected from the group consisting of a halogen atom, an alkyl group, a halogenated alkyl group, an alkoxy group, a halogenated alkoxy group, cyano group, and a substituted or unsubstituted aminosulfonyloxy group), and Q is a group represented by -CO-, -C(=NOH)- or -C(Y)(A)- wherein Y is hydrogen atom, and A is a group represented by -OR⁹ wherein R⁹ is hydrogen atom, an alkyl group, or an acyl group.

4. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 3, wherein Z is a group represented by the following formula:



5. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is a substituted or unsubstituted phenyl group.

6. (Previously Presented): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 2, wherein R⁶ is hydrogen atom, R⁷ is a halogen atom, and D is a group represented by NR⁸ wherein R⁸ is hydrogen atom or an alkyl group.

7. (Previously Presented): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 2, wherein R⁶ is hydrogen atom, R⁷ is a halogen atom, and D is oxygen atom.

8. (Previously Presented): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 2, wherein Q is -CO- or -CH(OH)-.

9. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is chlorine atom, D is NH and Q is -CO- or -CH(OH)-.

10. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is chlorine atom, D is NCH₃, and Q is -CO- or -CH(OH)-.

11. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is fluorine atom, D is NH and Q is -CO- or -CH(OH)-.

12. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is trifluoromethyl group, D is NH and Q is -CO- or -CH(OH)-.

13. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is bromine atom, D is oxygen atom and Q is -CO- or -CH(OH)-.

14. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is chlorine atom, D is oxygen atom and Q is -CO- or -CH(OH)-.

15. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is p-fluorophenyl group, R⁷ is fluorine atom, D is oxygen atom and Q is -CO- or -CH(OH)-.

16. (Original): The compound or a salt thereof, or a hydrate thereof or a solvate thereof according to claim 4, wherein X is unsubstituted phenyl group, R⁷ is bromine atom, D is oxygen atom and Q is -CO- or -CH(OH)-.

17. (Currently Amended): A medicament pharmaceutical composition comprising a substance selected from the group consisting of a compound and or a salt thereof, and or a hydrate thereof and or a solvate thereof according to claim 1 as an active ingredient.

18. (Currently Amended): A method for therapeutic treatment of a disease caused or promoted by nerve controlling function of a sigma ligand comprising administering to a mammal in need thereof a therapeutically effective amount of the pharmaceutical composition medicament according to claim 17, ~~which is used for therapeutic and/or preventive treatment of a disease caused or promoted by the nerve controlling function of a sigma ligand.~~

19. (Currently Amended): A sigma ligand comprising a substance selected from the group consisting of a compound and or a salt thereof, and or a hydrate thereof and or a solvate thereof according to claim 1.

20. (New): A method for preventive treatment of a disease caused or promoted by nerve controlling function of a sigma ligand comprising administering to a mammal in need thereof a preventively effective amount of the pharmaceutical composition according to claim 17.

21. (New): The method according to claim 18 wherein the mammal is a human.

22. (New): The method according to claim 20 wherein the mammal is a human.